0	For receiving Office use only		
0-1	International Application No.		
0-2	International Filing Date		
0-3	Name of receiving Office and "PCT International Application"		
0-4	Form - PCT/RO/101 PCT Request		
0-4-1	Prepared Using	PCT Online Filing Version 3.50 (Build 0001.162)	
0-5	Petition		
	The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty		
0-6	Receiving Office (specified by the applicant)	European Patent Office (EPO) (RO/EP)	
0-7	Applicant's or agent's file reference	1176WOORD01	
I	Title of Invention	NOVEL PYRROLODIHYDROISOQUINOLINES AS PDE10 INHIBITORS	
II	Applicant		
II-1	This person is:	applicant only	
II-2	Applicant for	all designated States except US	
II -4	Name:	ALTANA PHARMA AG	
II-5	Address:	Byk-Gulden-Str. 2 78467 Konstanz Germany	
11-6	State of nationality	DE	
11-7	State of residence	DE	
II-8	Telephone No.	+49-(0)7531-84-5320	
II-9	Facsimile No.	+49-(0)7531-84-5321	
II-10	e-mail	DEKON.IPPA-DE@altanapharma.com	

III-1	Applicant and/or Inventor	
III-1-1	This person is:	applicant and inventor
III-1-2	Applicant for	US only
III-1-3	Inventor for	AP: (BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW); EA: (AM AZ BY KG KZ MD RU TJ TM); EP: (AT BE BG CH&LI CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO SE SI SK TR); OA: (BF BJ CF CG CI CM
		GA GN GQ GW ML MR NE SN TD TG); AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH& LI CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS
		JP KE KG KP KR KZ LC LK LR LS LT LU LV
		MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
III-1-4	Name (LAST, First)	VENNEMANN, Matthias
III-1-5	Address:	Leinerstraße 20 78462 Konstanz Germany
III-1-6	State of nationality	DE
III-1-7	State of residence	DE

III-2	Applicant and/or Inventor	
III-2-1	This person is:	applicant and inventor
III-2 - 2	Applicant for	US only
III-2-3	Inventor for	AP: (BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW); EA: (AM AZ BY KG KZ MD RU TJ TM); EP: (AT BE BG CH&LI CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO SE SI SK TR); OA: (BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG); AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH&LI CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY
		TJ TM TN TR TT TZ UA UG US UZ VC VN YU
		ZA ZM ZW
III-2-4	Name (LAST, First)	BAER, Thomas
III-2-5	Address:	Berggaessle 5 78479 Reichenau Germany
111-2-6	State of nationality	DE
III-2-7	State of residence	DE

III-3	Applicant and/or inventor	
III-3-1	This person is:	applicant and inventor
III-3-2	Applicant for	US only
III-3-3	Inventor for	AP: (BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW); EA: (AM AZ BY KG KZ MD RU TJ TM); EP: (AT BE BG CH&LI CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO SE SI SK TR); OA: (BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG); AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH& LI CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
III-3 - 4	Name (LAST, First)	BRAUNGER, Juergen
III-3-5	Address:	Dorfwiesenweg 26 78465 Konstanz Germany
III-3-6	State of nationality	DE
III-3-7	State of residence	DE
111-4	Applicant and/or inventor	
III-4-1	This person is:	inventor only
111-4-4	Name (LAST, First)	MAIER, Thomas
III-4-5 	Address:	Panoramaweg 31 78333 Stockach Germany
111-5	Applicant and/or inventor	
III-5-1	This person is:	inventor only
III-5-4	Name (LAST, First)	GRAEDLER, Ulrich
III-5-5	Address:	Fichtestr. 15 69126 Heidelberg Germany
111-6	Applicant and/or inventor	
III-6-1	This person is:	inventor only
III-6- 4	Name (LAST, First)	GIMMNICH, Petra
III-6-5 ———	Address:	Sonnenbuehlstr. 58 78464 Konstanz Germany

 -7	Applicant and/or Inventor	T	
III-7-1	This person is:	inventor only	
111-7-4	Name (LAST, First)	QUINTINI, Gianluca	
III-7-5	Address:	Eichhornstr. 51	
		78464 Konstanz	
		Germany	
III-8	Applicant and/or inventor		
III-8-1	This person is:	inventor only	
III-8-4	Name (LAST, First)	CIAPETTI, Paola	
III-8-5	Address:	12, Route des Romains	
		67120 ALTORF	
		France	
III-9	Applicant and/or inventor		
III- 9 -1	This person is:	inventor only	
III-9-4	Name (LAST, First)	CONTRERAS, Jean-Marie	
111-9-5	Address:	7d, Rue du Petit Rempart	
		67230 BENFELD	
		France	
III-10	Applicant and/or inventor		
III-10-1	This person is:	inventor only	
III-10-4	Name (LAST, First)	WERMUTH, Camille Georges	
III-10-5	Address:	3, Rue de la Cote d'Azur	
		67100 STRASBOURG	
		France	
IV-1	Agent or common representative; or address for correspondence		
	The person identified below is hereby/	agent	
	has been appointed to act on behalf of the applicant(s) before the competent		
	International Authorities as:		
IV-1-1	Name (LAST, First)	WOLF, Ulrich	
IV-1-2	Address:	c/o ALTANA Pharma AG, Byk-Gulden-Str. 2	
		78467 Konstanz	
		Germany	
IV-1-3	Telephone No.	+49(0)7531-84-5320	
IV-1-4	Facsimile No.	+49(0)7531-84-5321	
IV-1-5	e-mail	dekon.ippa-de@altanapharma.com	
		052382.9	

V	DESIGNATIONS	
V-1	The filing of this request constitutes under Rule 4.9(a), the designation of all Contracting States bound by the PCT on the International filing date, for the grant of every kind of protection available and, where applicable, for the grant of both regional and national patents.	
VI-1	Priority claim of earlier regional application	
VI-1-1	Filing date	30 June 2003 (30.06.2003)
VI-1-2	Number	03014424.0
VI-1-3	Regional Office	EP
VI-2	Priority document request	
	The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) identified above as item(s):	VI-1
VII-1	International Searching Authority Chosen	European Patent Office (EPO) (ISA/EP)
VII-2	Request to use results of earlier search; reference to that search	
VII-2-1	Date	05 November 2003 (05.11.2003)
VII-2-2	Number	03014424.0
VII-2-3	Country (or regional Office)	EP
VIII	Declarations	Number of declarations
VIII-1	Declaration as to the identity of the inventor	-
VIII-2	Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent	
VIII-3	Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application	-
VIII-4	Declaration of inventorship (only for the purposes of the designation of the United States of America)	1
VIII-5	Declaration as to non-prejudicial disclosures or exceptions to lack of novelty	-

VIII-2-1	Declaration: Entitlement to apply for	
	and be granted a patent Declaration as to the applicant's	in relation to this international
	entitlement, as at the international filing	
	date, to apply for and be granted a	application
	patent (Rules 4.17(ii) and 51bis.1(a)(ii)),	
	in a case where the declaration under	
	Rule 4.17(iv) is not appropriate:	
	Name (LAST, First)	ALTANA PHARMA AG is entitled to apply
		for and be granted a patent by virtue of
		the following:
VIII-2-1(i	ALTANA PHARMA AG is entitled as employer
i)		of the inventor, MAIER, Thomas
VIII-2-1(i	ALTANA PHARMA AG is entitled as employer
i)		of the inventor, GRAEDLER, Ulrich
VIII-2-1(1	ALTANA PHARMA AG is entitled as employer
i) 		of the inventor, GIMMNICH, Petra
VIII-2-1(i)	i	ALTANA PHARMA AG is entitled as employer
		of the inventor, QUINTINI, Gianluca
VIII-2-1(i	ALTANA PHARMA AG is entitled as employer
i) 		of the inventor, VENNEMANN, Matthias
VIII-2-1(i)	i	ALTANA PHARMA AG is entitled as employer
•		of the inventor, BAER, Thomas
VIII-2-1(i	ALTANA PHARMA AG is entitled as employer
i)		of the inventor, BRAUNGER, Juergen
VIII-2-1(i	an assignment from CIAPETTI, Paola to
v)		ALTANA PHARMA AG, dated 07 February 2004
		(07.02.2004)
VIII-2-1(an assignment from CONTRERAS, Jean-Marie
v)	j	to ALTANA PHARMA AG, dated 16 March 2004
		(16.03.2004)
VIII-2-1(an assignment from WERMUTH, Camille
v)		Georges to ALTANA PHARMA AG, dated 05
		March 2004 (05.03.2004)
	This declaration is made for the	all designations except the designation
x)	purposes of:	of the United States of America
	<u> </u>	

VIII-4-1- Prior applications:

-		·
VIII-4-1	Declaration: Inventorship (only for the purposes of the designation of	
	the United States of America)	
	Declaration of Inventorship (Rules	I hereby declare that I believe I am the
	4.17(iv) and 51bis.1(a)(iv)) for the	original, first and sole (if only one
	purposes of the designation of the United States of America:	inventor is listed below) or joint (if
	United States of America.	more than one inventor is listed below)
		·
		inventor of the subject matter which is
		claimed and for which a patent is
		sought.
		This declaration is directed to the
		international application of which it
		forms a part (if filing declaration with
		application).
		I hereby declare that my residence,
		mailing address, and citizenship are as
		stated next to my name.
		I hereby state that I have reviewed and
		understand the contents of the above-
	1	identified international application,
		including the claims of said
		application. I have identified in the
		request of said application, in
		compliance with PCT Rule 4.10, any claim
	·	to foreign priority, and I have
		identified below, under the heading
		"Prior Applications", by application
		number, country or Member of the World
		Trade Organization, day, month, and year
	•	of filing, any application for a patent
		or inventor's certificate filed in a
		country other than the United States of
		America, including any PCT international
		application designating at least one
		country other than the United States of
		America, having a filing date before
		that of the application on which foreign
		priority is claimed.
		Parorrol To oranica.

		I hereby acknowledge the duty to disclose information that is known by me to be material to patentability as defined by 37 C.F.R. § 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the PCT international filing date of the continuation-in-part application. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.
	Name (LAST, First)	VENNEMANN, Matthias
1-2	Residence: (city and either US State, if applicable, or country)	Konstanz, Germany
VIII-4-1- 1-3	Mailing address:	Leinerstraße 20 D-78462 Konstanz Germany
	Citizenship:	DE
VIII-4-1- 1-5	Inventor's Signature: (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	/Matthias VENNEMANN/
	Date: (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)	30 June 2004 (30.06.2004)

VIII-4-1- 2-1	Name (LAST, First)	BAER, Thomas	
	Residence: (city and either US State, if applicable, or country)	Reichenau, Germany	
VIII-4-1- 2-3	Mailing address:	Berggaessle 5 D-78479 Reichenau Germany	
VIII-4-1- 2-4	Citizenship:	DE	
VIII-4-1- 2-5	Inventor's Signature: (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	/Thomas BAER/	
VIII-4-1- 2-6	Date (of signature which is not contained in the request, or of the declaration that is corrected or added under Rule 26ter after the filing of the international application)	30 June 2004 (30.06.2004)	
VIII-4-1- 3-1	Name (LAST, First)	BRAUNGER, Juergen	
VIII-4-1- 3-2	Residence: (city and either US State, if applicable, or country)	Konstanz, Germany	
VIII-4-1- 3-3	Mailing address:	Dorfwiesenweg 26 D-78465 Konstanz Germany	
VIII-4-1- 3-4	Citizenship:	DE	
VIII-4-1- 3-5	Inventor's Signature: (if not contained in the request, or if declaration is corrected or added under Rule 26ter after the filing of the international application. The signature must be that of the inventor, not that of the agent)	/Juergen BRAUNGER/	
VIII-4-1- 3-6		30 June 2004 (30.06.2004)	

Print Out (Original in Electronic Form)

X	Check list	number of sheets	electronic file(s) attached
X-1	Request (including declaration sheets)	11	✓
X-2	Description	97	✓
<- 3	Claims	22	√
<-4	Abstract	1	✓
<- 5	Drawings	0	✓
<-7	TOTAL	131	
	Accompanying Items	paper document(s) attached	electronic file(s) attached
K-8	Fee calculation sheet	-	✓
X-11	Copy of general power of attorney	-	reference no. 00026160.2
(-17	PCT-SAFE physical media	-	-
(-19	Figure of the drawings which should accompany the abstract		
(-20	Language of filing of the international application	English	
(-1	Signature of applicant, agent or common representative	(PKCS7 Digital Signa	iture)
(-1-1 [°]	Name (LAST, First)	WOLF, Ulrich	
(-1-2	Name of signatory		
(-1-3	Capacity		

FOR RECEIVING OFFICE USE ONLY

10-1	Date of actual receipt of the purported international application	
10-2	Drawlngs:	
10-2-1	Received	
10-2-2	Not received	
10-3	Corrected date of actual receipt due to later but timely received papers or drawlngs completing the purported International application	,
10-4	Date of timely receipt of the required corrections under PCT Article 11(2)	
10-5	International Searching Authority	ISA/EP
10-6	Transmittal of search copy delayed until search fee is paid	

FOR INTERNATIONAL BUREAU USE ONLY

11-1	Date of receipt of the record copy by		
11-1	bate of receipt of the record copy by		
	the International Bureau		
	jule international bureau		
		i	

PCT (ANNEX - FEE CALCULATION SHEET)

Print Out (Original in Electronic Form)

(This sheet is not part of and does not count as a sheet of the international application)

0	For receiving Office use only		<u></u>	
0-1	International Application No.			
)-2	Date stamp of the receiving Office			
				,
)-4	Form PCT/RO/101 (Annex)	· -		
	PCT Fee Calculation Sheet			
	Prepared Using	PCT Online Fil	ling	
			(Build 0001.162	2)
)-9	Applicant's or agent's file reference	1176WOORD01		
?	Applicant	ALTANA PHARMA AG		
12	Calculation of prescribed fees	fee amount/muliplier	Total amounts (EUR)	
12-1	Transmittal fee T	\$	100	<u></u>
12-2-1	Search fee S	4>	1550	
12-2-2	International search to be carried out by	EP		
12-3	International filing fee			
	(first 30 sheets) i1	902		
12-4	Remaining sheets	101		
12-5	Additional amount (X)	10		
12-6	Total additional amount i2	1010		
12-7	i1 + i2 = i	1912		
12-12	Electronic Filing reduction (Full) R	-129		
12-13	Total International filing fee (i-R)	4 >	1783	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
12-14	Fee for priority document			
	Number of priority documents requested	1		
2-15	Fee per document (X)	30		
12-16	Total priority document fee: P	4>	30	
2-17	TOTAL FEES PAYABLE (T+S+I+P)	4>	3463	
2-19	Mode of payment	authorization	to charge dep	osit account
2-20	Deposit account instructions			
	The receiving Office	European Pater	nt Office (EPO)	(RO/EP)
	Authorization to charge the total fees indicated above.	✓		· · · · · · · · · · · · · · · · · · ·
12-20-2	Authorization to charge any deficiency or credit any overpayment in the total fees indicated above.	✓		
12-20-3	Authorization to charge the fee for priority document.	✓		
2-21	Deposit account No.	28000022		
2-22	Date	30 June 2004 (30.06.2004)		
2-23	Name and signature	ALTANA PHARMA AG,		
		/Ulrich WOLF/		

PCT (ANNEX - FEE CALCULATION SHEET)

Print Out (Original in Electronic Form)

(This sheet is not part of and does not count as a sheet of the international application)

REMARKS

13-1-1	•	It seems to me that the print out (Original in Electronic Form) does not reflect the data that have been entered into PCT online Filing Software Version 3.50 (Build 0001.162). The following was intended: VENNEMANN, Matthias; BAER, Thomas and BRAUNGER, Juergen are applicants and inventors. They are applicants for US only and inventors for all designated states. MAIER, Thomas; GRAEDLER, Ulrich; GIMMNICH, Petra; QUINTINI, Gianluca; CIAPETTI, Paola; CONTRERAS,
		Jean-Marie and WERMUTH, Cammille Georges are all inventors only. They are inventors for all designated states with the exception of CA, PH and US.

